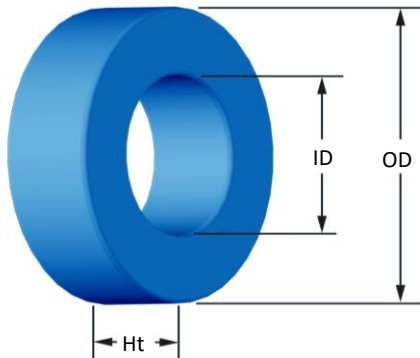




Part Number:

MS-027147-8

Revision 2022-Apr-28



(If coated, Max./Min. includes coating)

OD	(nom. - bare core) (max.)	6.60 mm 7.24 mm	0.260 in 0.285 in										
ID	(nom. - bare core) (min.)	2.67 mm 2.29 mm	0.105 in 0.090 in										
HT	(nom. - bare core) (max.)	2.54 mm 3.18 mm	0.100 in 0.125 in										
Mass	(approximate)	0.38 grams											
Magnetic Dimensions	A _e - Eff. Mag. Cross Section	0.0467 cm ²											
	L _e - Eff. Mag. Path Length	1.36 cm											
	V _e - Eff. Core Volume	0.0640 cm ³											
	WA - Min. Eff. Window Area	0.0412 cm ²											
	sa - Surface Area	1.83 cm ²											
Inductance	mlt - mean length per turn	1.25 cm											
	μ _i (reference)	147											
	A _L value (nominal)	64 nH/N ²											
	Test Winding	N=35, #32 AWG											
	Frequency	10 kHz											
Core Loss	Voltage on Agilent 4284A	0.007 V											
	AL tolerance	±12%											
	Core Loss(mW/cm³):	$\frac{f}{\frac{a}{B_{pk}^3} + \frac{b}{B_{pk}^{2.3}} + \frac{c}{B_{pk}^{1.65}}} + d \cdot B_{pk}^2 \cdot f^2$											
	where B _{pk} expressed in gauss, f expressed in hertz, and:	a=1.394E+10, b=1.034E+09, c=1.244E+07, d=4.007E-14											
	B _{pk}	1000 G											
DC Saturation	frequency	50 kHz											
	Core Loss (nominal)	276 mW/cm³											
	Core Loss (maximum)	318 mW/cm³											
	%μ _i	$\frac{1}{a + b \cdot H^c} + d$											
	where H expressed in oersteds, and:	a=1.000E-02, b=4.732E-05, c=1.539, d=0.000											
Coating/Pkg	H _{DC}	40 Oe											
	Percent Initial Perm.(nom.)	42.0%											
	Percent Initial Perm.(min.)	35.3%											
	Coating Type:	Parylene N											
	Voltage Breakdown (min.)	500 Vrms											
Winding Table	Limit	0.1 mA, 5 s											
	Package Quantity	21,600 Pcs/Box											
	Wire Size	AWG	26	28	30	32	34	36	38	40	42	44	-
	mm	0.400	0.315	0.250	0.200	0.160	0.125	0.100	0.080	0.063	0.050	-	-
	Single Turns	11	14	19	24	30	38	49	61	77	96	-	-
Layer R _{dc} (Ω)	18.3 m	37.1 m	80.1 m	160.9 m	319.9 m	644.5 m	1.3	2.6	5.3	10.4	-	-	
Full Turns	11	17	26	41	63	98	151	234	362	560	-	-	
Winding R _{dc} (Ω)	18.3 m	45.1 m	109.6 m	274.9 m	671.8 m	1.7	4.1	10.0	24.7	60.8	-	-	

